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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/094,052 | 06/09/1998 | PETER W.J. JONES | 47513 | 7937 |

7590

08/30/2002

DIKE, BRONSTEIN, ROBERTS & CUSHMAN
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EXAMINER

NGUYEN, THONG Q

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2872

DATE MAILED: 08/30/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/094,052

Applicant(s)

JONES, PETER W.J.

Examiner

Thong Q. Nguyen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-9 and 11-15 is/are pending in the application.
- 4a) Of the above claim(s) 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-9, 11 and 13-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 June 1998 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☒ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Species (a) in Paper No. 26 received by the Office on 6/17/2002 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

As a result of applicant's election, claims 1-5, 7-9, 11 and 13-15 are examined in this Office action, and claim 12 has been withdrawn from further consideration as being directed to non-elected species.

Oath/Declaration

2. The objection to the verified Statement Claiming Small entity Status as set forth in the previous Office actions (Paper Nos. 13 and 17) is repeated. *It is noted that in the Amendment (Paper No. 24) at page 3, while applicant has stated that a new verified Statement Claiming Small entity Status will be filed at a later date; however, the Office has not received such a new statement at the time the application is reexamined.*

Drawings

3. The objections to the drawings as set forth in the previous Office action (Paper No. 2, page 2, elements 2 and 4) are repeated. *It is noted that in the Amendment at page 3, while applicant has stated that a new drawings will be filed at a later date; however, the Office has not received such a new drawings at the time the application is reexamined.*

Specification

4. The disclosure is objected to because of the following informalities: a) Page 3: lines 21-22, the description thereof "This surface includes optical lenses, wide FOV lenses, binoculars, telescopes, gun sights and night vision goggles" is unclear. It is unclear what surface of binoculars (or telescopes or gun sights or goggles" applicant implies here? In other words, the description "This surface includes binoculars" is unclear; b) Page 4, lines 16-17, what is the differences between the brief descriptions of figures 4 and 5? c) Page 4: lines 23-24, what is the difference between the brief descriptions of figures 12 and 13? d) Page 4: lines 25-26, what is the difference between the brief descriptions of figures 14 and 15? Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 13 and 14 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

a) Claim 13 is rejected under 35 USC 112, first paragraph because the disclosure, as originally filed, does not provide support for the feature that the wide angle field of view of the optical lens is at least 40 degrees as recited in the newly-added claim 13.

b) Claim 14 is rejected under 35 USC 112, first paragraph because the disclosure, as originally filed, does not provide support for the feature that the vane means produce tubes with a length-to-width ratio greater than the length-to-width ratio of the FOV as recited in the newly-added claim 14.

Claim Rejections - 35 USC § 103

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones (U.S. Patent No. 4,929,055, of record).

Jones discloses an apparatus for use with an optical device having a light reflecting surface such as a binocular device, a telescope, a periscope, a rifle scope, a night vision device or the like (see column 1). The apparatus comprises a set of concentric circular vanes positioned in front of a reflecting surface of a lens element located in the optical device for the purpose of reducing the reflection of light incident on the lens reflecting surface of the optical device (see column 2, for example). Each of the circular vanes has a first end disposed near the lens reflecting surface, and a second end disposed away from the first end. It is also noted that a combination of concentric circular vanes and radial vanes is disclosed by Jones as can be seen at column 5 and shown in fig. 9. While Jones does not clearly state the apparatus is mounted on a field goggle; however, such a feature is inherent from the Jones' teaching because at column 1 he states that the apparatus can be used by a person of a battlefield troop in a night time in the form of a night vision device. See Jones, columns 1 and 3-4 and figs. 1 and

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8-9, for example. Jones also teaches that his optical apparatus has a length-to-width ratio which is equal to or different from the length-to-width ratio of the field of view (see columns 2, 3-4, claims 1 and 13, for example). In the embodiment provided at column 5, Jones has suggested that the vanes are arranged in a non-parallel manner and in inclined angles different from 90 degrees with respect to the lens reflecting surface of the optical device. While in the embodiment provided at column 5, John discloses the use of the inclined vanes in front of device having non-magnification feature such as a mirror or windshield; however, the inclined vanes are also used in front of other optical device having magnification as stated by John in column 6, lines 9-15 thereof

"Structures in accordance with the inventions can be...the like." See also column 1.

Thus, it would have been obvious to one skilled in the art at the time the invention was made to utilize the non-parallel vanes disclosed in the embodiment stated in column 5 for optical device having optical lens of magnification such as binoculars, telescope or goggles as suggested by the same inventor stated in columns 1 and 6 for the purpose of reducing reflections of light incident on a lens surface located behind the mentioned vanes in a binocular or telescope or goggles while still maintaining a wide field of view for the user of such device.

9. Claims 1-5, 7, 11 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones (U.S. Patent No. 4,929,055) in view of Softly (U.S. Patent No. 4,365,866) (both of record).

Jones discloses an apparatus for use with an optical device having a light reflecting surface such as a binocular device, a telescope, a periscope, a rifle scope, a

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night vision device or the like (see column 1). The apparatus comprises a set of concentric circular vanes disposed in front of a lens surface of an optical device for the purpose of reducing the reflection of light incident on the lens reflecting surface of the optical device while still maintaining a substantially field of view (see column 2, for example). Each of the circular vanes has a first end disposed near the lens reflecting surface, and a second end disposed away from the first end. It is also noted that a combination of concentric circular vanes and radial vanes is disclosed by Jones as can be seen at column 5 and shown in fig. 9. While Jones does not clearly state the apparatus is mounted on a field goggle; however, such a feature is inherent from the Jones' teaching because at column 1 he states that the apparatus can be used by a person of a battlefield troop in a night time in the form of a night vision device. See Jones, columns 1 and 3-4 and figs. 1 and 8-9, for example. Jones also teaches that his optical apparatus has a length-to-width ratio which is equal to or different from the length-to-width ratio of the field of view (see columns 2, 3-4, claims 1 and 13, for example). In the embodiment provided at column 5, Jones has suggested that the vanes are arranged in a non-parallel manner and in inclined angles different from 90 degrees with respect to the lens reflecting surface of the optical device. As a result of such an arrangement, the distance between two adjacent first ends of the vanes is different from the distance defined between two adjacent second ends of the vanes. While in the embodiment provided at column 5, John discloses the use of the inclined vanes in front of device having non-magnification feature such as a mirror or windshield; however, the inclined vanes are also used in front of other optical device having

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magnification as stated by John in column 6, lines 9-15 thereof "Structures in accordance with the inventions can be...the like." See also column 1.

Thus, the structure concerning the vanes disposed in front of a lens surface having a curved shape for reduction light reflections incident on the lens surface as provided by Jones meets almost all features recited in the present claims. The only feature missing from the Jones reference is that he does not clearly teach that the first ends of the concentric circular vanes are spaced further apart from each other at a different distance than the second ends of the concentric circular vanes are spaced apart from each other. However, such an arrangement of the vanes as claimed is merely that of a preferred embodiment and no criticality has been disclosed. The support for this conclusion is found in the present specification in which it suggests a variation of arrangements of the vanes. In one variation of arrangement of the vanes, the distance between two adjacent first ends is smaller than the distance between two adjacent second ends. See specification at pages 5-6 and figs. 6-7 and 10-11, for example.

Further, it is noted that the use of an array of vanes disposed in front of a lens surface having a curved shape for the purpose of reduction light reflections incident on the lens surface wherein the distance between two adjacent first ends near the lens surface of a vane is larger than the distance between two adjacent second ends farther from the lens surface of the vane for the purpose of reduction the light reflection incident on the lens surface is suggested to one skilled in the art as can be seen in the system provided by Softy. In particular, Softy discloses the use of an array of vanes (21) in front

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of a curved screen (11) and teaches that the vanes are arranged in a manner that the first ends near the curved screen of the vanes is spaced further apart from each other at a different distance than the second ends disposed farther from the curved screen of the vanes are spaced apart from each other. See columns 2-3 and figs. 2-4, in particular, at column 2, lines 52-57 which states: "In a television studio most of the ambient light falls towards the monitor screen from an upward direction rather from the side, and so the horizontally extending slats 21 are suitably positioned to intercept this light which would otherwise be reflected from the screen and impair the quality of the image."

Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the apparatus having vanes disposed in front of a lens reflecting surface of an optical device as provided by Jones (column 5, lines 10-34) by rearranging the orientation of the vanes so that the distance between two adjacent first ends of the vanes is different from the distance defined between two adjacent second ends of the vanes as suggested by Softy for the purpose of reducing the light reflection while still maintaining the wide field of view of the optical device.

Response to Arguments

10. Applicant's arguments filed on 12/14/2001 have been fully considered but they are not persuasive.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208

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USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The present claims are rejected by a combination of the teachings provided by Jones and Softy wherein the art of John contains almost features recited in the present claim except the orientation of the vanes, and the art of Softly discloses the use of a plurality of slats located in front of an optical lens having a curved lens surface which slabs are adjustable in their orientation for the purpose of reducing the light reflection. One skilled in the art will modify the orientation of the vanes in the system of Jones by the suggestion provided by Softly because 1) Jones discloses that the orientation of the vanes is changeable; and 2) Softly discloses that the slabs are oriented so that the first ends of the slabs near the lens surfaces are spaced further apart from each other at a different distance than the second ends of the slabs disposed farther from the curved lens surface are spaced apart from each other .

In regard to applicant's arguments concerning the preferred embodiment has no bearing on patentability , the Examiner respectfully invited that the applicant to review the present specification and the rejection as set forth in the previous Office action. It is the examiner's opinion that *the invention is directed to the arrangement/orientation of the vanes in an inclined manner or non-parallel manner. The difference in space/distance between two adjacent vanes in the first ends and that of the two mentioned vanes in the second ends is not important at all because the specification clearly discloses two embodiments in which one embodiment discloses that the space between two adjacent vanes at the first ends is **larger than** the space between the two mentioned vanes at the second ends, and the other embodiment discloses that the*

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*space between two adjacent vanes at the first ends is **smaller than** the space between the two mentioned vanes at the second ends.*

In regard to applicant's arguments that there is not any motivation or reason for one skilled in the art to combine the teaching suggested by Softly, i.e., the orientation of the slabs, into the system provided by John, the Examiner respectfully disagrees with the applicant for the following reasons.

First, the applicant is respectfully invited to review the art of John in column 5, lines 35+ in which John clearly teaches: "The tubular...used. In some applications, it may be desirable to arrange them so that they are at other than a 90° angle with respect to the reflective surface in question." . To support for the teaching, John disclosed one example in which the vanes are arranged/oriented in a non-parallel manner in which the angle defined between a particular vane and the lens surface is different from 90 degrees as can be seen in the embodiment disclosed in column 5, lines 41+ and shown in fig. 10.

Second, while John discloses just one example concerning the arrangement/orientation of the vanes in which the spaces between two adjacent vanes at the first ends is larger than the space between the two mentioned vanes at the second ends; however, ***there is not any reason stated by John for not arrangement/orientation of the vanes so that the space between two adjacent vanes at the first ends is smaller than the space between the two mentioned vanes at the second ends.*** Accordingly, it would appear that one skilled in the art would have recognized that the orientation of the vanes so that the space between two

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adjacent vanes in the first ends is larger than the space between two adjacent vanes in the second ends and the orientation of the vanes so that the space between two adjacent vanes in the first ends is smaller than the space between two adjacent vanes in the second ends would have been equally obvious.

Third, Softly discloses a system positioned in front of a curved optical reflecting surface and teaches the slabs formed the system be adjustable in their orientation for the purpose of controlling the disadvantage of the light reflection. While the observer is located in front of the lens and the system; however, the examiner has not suggested to tried to bodily incorporate the two structures into one. The feature of variable orientation of slabs disposed in front of a reflecting surface provided by Softly is the suggestion which one skilled in the art will utilize to modify/improve the system of Jones for the purpose of increasing the ability of reduction of light reflection. Applicant should note that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

In regard to applicant's arguments with respect to claims 8-9, the arguments have been considered but they are moot by the new ground of rejection as set forth in this Office action.

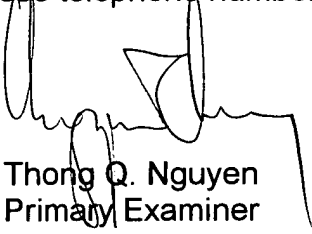
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Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong Q. Nguyen whose telephone number is (703) 308-4814. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cassandra Spyrou can be reached on (703) 308-1687. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0956.



Thong Q. Nguyen
Primary Examiner
Art Unit 2872

August 28, 2002